

### **Remarks**

Claim 3 has been amended. Claims 1, 3-5, 7-8, and 10-12 remain in this application.

### **Claim Rejections Under 35 U.S.C. §112**

Claim 3 has been rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that the amounts of alkyd-stabilized acrylic dispersion and pigment dispersion required are not clear based on the ratios and weight percents.

Applicants have amended claim 3 so that the alkyd-stabilized acrylic dispersion can be present in the ink composition in amounts between about 35% and about 50%. Support for this amendment can be found in the specification as page 14, lines 4-7.

### **Claim Rejection Under 35 U.S.C. §103**

Applicants' invention of utilizing an alkyd-stabilized acrylic dispersion having certain characteristics, specifically having a z-average molecular weight greater than 20,000, an oil length in the range of about 40% to about 70% and an acid value less than 10, and a non-volatile materials content of greater than 85%, in combination with a pigment dispersion, provide for inks having excellent print quality. The dispersions of Applicants' invention utilize an acrylic core that is alkyd modified. As will be described below, there is no motivation to combine any of the cited references to provide Applicants' invention.

The Examiner has rejected claims 1, 4-5, 7-8 and 10-12 under 35 U.S.C. 103(a) as being unpatentable over Nagasawa et al (U.S. 5,846,307) in view of EP 555503 and Wakimoto et al. (U.S. 3,734,872). The Examiner asserts that it would have been obvious to one of ordinary skill in the art to use the alkyd-stabilized acrylic dispersion disclosed by EP 555503 in Nagasawa et al in order to produce ink with excellent stability, low grit, filterability, viscosity and dry time and thereby arrive at the claimed invention.

Nagasawa discloses an ink composition comprising a pigment dispersion, an ink solvent, and a water-soluble resin. Nagasawa describes the water-soluble resin as an acrylic polymer

having a weight average molecular weight preferably from 20,000 to 1000, and having an acid value of from 100 to 250. Nagasawa does not teach or suggest utilizing Applicants' alkyd-stabilized acrylic dispersion (i.e., an acrylic core that is alkyd modified) as its resin, having an **average molecular weight greater than 20,000 and an acid value less than 10**. Further, Nagasawa does not teach nor suggest utilizing an alkyd-stabilized acrylic dispersion having an oil length in the range of about 40% to about 70%, since the dispersion of Nagasawa does not teach or even suggest such dispersion being derived from triglyceride oils. Further still, Nagasawa does not teach the relative combination of an alkyd-stabilized acrylic dispersion:pigment dispersion in a relative weight ratio of 45:55 to about 55:45 for an ink composition. Rather, Nagasawa's acrylic dispersion:pigment dispersion ratio is closer to 1:5. There is no motivation to combine Nagasawa with EP 555503 to arrive at the Applicants' claimed invention.

Hindsight is certainly required to move from this Nagasawa disclosure to the requirements of claims 1, 4-5, 7-8 and 10-12. Claim 1 requires the presence of an alkyd-stabilized acrylic dispersion having an average molecular weight greater than 20,000 and an oil length in the range of about 40% to about 70% and an acid value less than 10. Clearly, this aspect of the claimed invention is not taught or suggested by Nagasawa. Moreover, since Nagasawa fails to teach or suggest alkyd-stabilized acrylic resin dispersions, the references cited by the Examiner certainly do not teach or suggest the invention covered by dependent claims 4-5, 7-8, and 10-12.

In the present case, none of the prior art cited by the Examiner suggest the selection and use of an alkyd-stabilized acrylic dispersion having an average molecular weight greater than 20,000 and an oil length in the range of about 40% to about 70% and an acid value less than 10, as required by all the claims. Further, there is no teaching or suggestion in Nagasawa of the ink composition of claims 1, 4-5, 7-8, and 10-12. It is equally well established that the prior art must provide a motivation or reason for one skilled in the art, **without the benefit of Applicants' specification**, to make the necessary changes in the reference. In the present case, the Examiner has not presented any evidence to support the conclusion that one skilled in the art would have had any motivation to make the necessary changes.

The acrylic resin of Nagasawa's invention has nothing whatsoever to do with Applicants' claimed invention. Nagasawa, when considered as a whole, thus teaches away from the

requirements of claims 1, 4-5, 7-8, and 10-12. A skilled artisan would therefore tend to ignore the alkyd-stabilized acrylic dispersion ink compositions claimed in Applicants' invention, in favor of acrylic dispersions disclosed in the prior art. This ignorance would, in turn, preclude practice of the invention covered by claims 1, 4-5, 7-8, and 10-12 and hence deprive the art of the beneficial and advantageous results which flow therefrom. Accordingly, it is not possible for Nagasawa to provide a basis for modifying any art to arrive at the invention of claims 1, 4-5, 7-8, and 10-12 or to suggest its advantageous results.

Applicants submit that any motivation to combine the teachings of the cited references comes solely from the present application and not from the references themselves. As such the rejection is improper. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

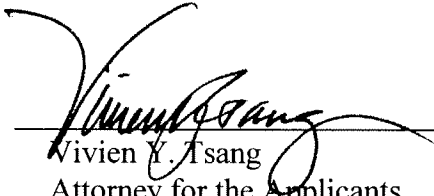
The Examiner's combination of the cited references cannot, therefore, support a rejection of Applicants' claims based on obviousness. Accordingly, reconsideration of claims 1, 3-5, 7-8, and 10-12 and withdrawal of the rejections under 35 U.S.C. §103 is respectfully requested.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 19-2025.

Respectfully submitted,

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October 5, 2007

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